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CLAIMS

1. A process for the production of plants with improved growth characteristics which comprises following steps:
 - transfer and integration of a DNA sequence coding for a prokaryotic asparagine synthetase in the plant genome
 - wherein said DNA sequence is linked to a regulatory sequence for the expression of said DNA and import of the asparagine synthetase into the chloroplasts and/or plastids of a plant cell and wherein said plant cell expresses the asparagine synthetase in its chloroplasts and/or plastids and
 - regeneration of intact and fertile plants from the transformed cells.
2. A plant cell wherein a prokaryotic ammonium specific asparagine synthetase is expressed in its chloroplasts and plastids.
3. A plant cell according to claim 2 which contains a gene construct which provides a reduced level of expression of endogenous glutamine synthetase activity.
4. A plant, seeds and propagation material containing cells as claimed in claims 2 and 3.
5. A gene construct comprising a gene encoding a prokaryotic ammonium specific asparagine synthetase operatively linked to a regulatory sequence for the expression of said DNA and import of the asparagine synthetase into the chloroplasts and/or plastids of a plant cell and wherein said plant cell expresses the asparagine synthetase in its chloroplasts and/or plastids.

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6. A gene construct according to claim 5, wherein the asparagine synthetase gene is an E. coli asparagine Synthetase gene with a chloroplastic leader peptide at its N-terminus.

7. A vector containing a gene construct according to claims 5 and 6 which gene construct comprises a sequence which encodes a chloroplastic leader peptide at its N-terminus.

8. A plant cell transformed with the gene construct according to claims 5 and 6 or with vector according to claim 7.

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